

Claim 35, line 2, change "of said" to ~~of the~~; and
line 3, change "processor" to ~~microprocessor~~.

21 39. (Once Amended) A [microprocessor chip] computer system, comprising:

a processor module, said processor module processes instructions in accordance with a clock signal, and said processor module supports a normal clock mode and a plurality of reduced power modes; and

a temperature sensor thermally coupled to said processor module, said temperature sensor produces a temperature signal based on the temperature of said processor module,

wherein the temperature signal from said temperature sensor is used to regulate the temperature of said [microprocessor] processor module by altering the frequency of the clock signal, and

wherein overheating of said processor module is averted by reducing the frequency of the clock signal to a value associated with one of the reduced power modes.

42. (Once Amended) A [microprocessor chip] computer system as recited in claim 39, wherein [the temperature of said microprocessor chip is regulated by altering the frequency of the clock signal in accordance with the temperature signal from] said temperature sensor is internal to said processor module.

43. (Once Amended) A [microprocessor chip as recited in claim 39, wherein said microprocessor chip further comprises:] computer system, comprising:

a processor module, said processor module processes instructions in accordance with a clock signal;

an activity detector [operatively connected to said processor module], said activity detector monitors activity of said processor module[,]; and

a temperature sensor thermally coupled to said processor module, said temperature sensor produces a temperature signal based on the temperature of said processor module,

wherein the temperature signal from said temperature sensor is used to regulate the temperature of said processor module, and

wherein the frequency of the clock signal utilized by said processor module is controlled based on the temperature and the activity of said processor module.

34
44. (Once Amended) A [microprocessor chip as recited in claim 39, wherein said microprocessor chip further comprises:] computer system, comprising:

a processor module, said processor module processes instructions in accordance with a clock signal;

an activity detector [operatively connected to said processor module], said activity detector monitors activity of said processor module;

62
a temperature sensor thermally coupled to said processor module, said temperature sensor produces a temperature signal based on the temperature of said processor module; and

a clock unit operatively connected or internal to said processor module, said clock unit produces the clock signal for the processor module, the clock signal having a frequency that varies in accordance with both the activity and the temperature of the processor module,

wherein the temperature signal from said temperature sensor is used to regulate the temperature of said processor module.

45. (Once Amended) A [microprocessor chip as recited in claim 39, wherein said microprocessor chip further comprises:] computer system, comprising:

a processor module, said processor module processes instructions in accordance with a clock signal;

an activity detector [operatively connected to said processor module],
said activity detector monitors activity of said processor module;

a temperature sensor thermally coupled to said processor module, said
temperature sensor produces a temperature signal based on the temperature of
said processor module; and

62 a clock mode selector operatively connected or internal to said processor
module, said clock mode selector includes a plurality of clock modes that
provide different frequencies for the clock signal utilized by said processor
module, the particular mode being selected is dependent upon both the activity
and the temperature of the processor module,

wherein the temperature signal from said temperature sensor is used to
regulate the temperature of said processor module.

Claim 50, line 5, delete "the" (first occurrence only).

Claim 51, line 9, change "is" to -being-.

Claim 64, line 2 after ",", insert -and-.

Please **ADD** claims 63 - 74 as follows:

42
-63. A computer system as recited in claim 56, wherein said temperature
sensor is internal to said microprocessor.

63
64. A computer system as recited in claim 51,
wherein said fan is operable in a plurality of different speeds, and
wherein when the temperature indication indicates that the temperature
of said microprocessor does not exceed the second temperature threshold, said
fan is not activated.

³⁸
~~65.~~ A computer system as recited in claim ~~51~~³², wherein said thermal manager deactivates the fan when said microprocessor enters a reduced power mode.

³⁹
~~66.~~ A computer system as recited in claim ~~51~~³², wherein said thermal manager deactivates the fan when said microprocessor enters a sleep mode.

⁵⁰
~~67.~~ A method as recited in claim ~~48~~⁵⁰, wherein said method further comprises:
determining whether said microprocessor enters a reduced power mode;
and
deactivating the fan when said determining operates to determine that
said microprocessor has entered the reduced power mode.

⁵¹
~~68.~~ A method as recited in claim ~~67~~⁵¹, wherein the reduced power mode is a
sleep mode.

⁵²
~~69.~~ A method as recited in claim ~~48~~⁵², wherein the fan is operable at a plurality
of speeds, and
wherein said activating of the fan operates to determine a speed for the
fan based on the temperature of the microprocessor.

¹⁰
~~70.~~ A method as recited in claim ~~35~~¹⁰, wherein the low power state is a sleep
state.

¹²
~~71.~~ A method as recited in claim ~~34~~¹¹,
wherein said monitoring the activity of the microprocessor determines
whether the microprocessor is in a sleep state, and

wherein said controlling of the speed of the fan operates to stop the fan when the microprocessor is determined to be in the sleep state.

¹⁸
~~72.~~ A method as recited in claim ¹⁷~~38~~, wherein the fan and the microprocessor are parts of a computer.

¹⁹
~~73.~~ A method as recited in claim ¹⁷~~38~~, wherein the speed of the fan is controlled by the control signal such that the speed is dependent on the extent to which the temperature of the microprocessor exceeds a predetermined threshold temperature.

²⁰
~~74.~~ A method as recited in claim ¹⁷~~38~~, wherein said controlling of the speed of the fan is performed with pulse width modulation.—
